

Site:	Lee's Lane
Break:	8.3v7
Other:	

145 Technology Park, Norcross, GA 30092-2979, (404) 662-2300, Fax (404) 662-2408

August 29, 1990
RMIV-REM-90-0176
Reply Requested: N/A

Mr. Derek Matory
U.S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365


Subject: REM III PROGRAM - EPA CONTRACT NO. 68-01-7250
W.A. NO. 239-4L43; LEE'S LANE LANDFILL
RESPONSE TO KNREPC AND MSD COMMENTS ON THE
PLAN AND PROCEDURES FOR O&M ACTIVITIES DOCUMENT

Dear Mr. Matory:

Ebasco Services Incorporated has reviewed the comments submitted by the Kentucky Natural Resources and Environmental Protection Cabinet (KNREPC) and the Louisville and Jefferson County Metropolitan Sewer District (MSD) regarding the Plans and Procedures for Operations and Maintenance (O&M) of the Lee's Lane Landfill Site. As the initial author of the Plans and Procedures document, we have enclosed responses to the comments which reference technical and procedural issues. Other issues such as monetary limits requested by MSD, non-technical items, and contractual wording are not addressed herein.

If additional information is needed or if you have any questions regarding this subject, please contact Paul Stone at (404) 662-2443 or Dick Troso at (404) 662-2342.

Very truly yours,


D. Karen Knight, CHMM
Regional Manager
Region IV

PS:mlf

Enclosure

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cc: R. Fellman
W. Mendez
K. Meyer
S. Missailidis
P. Stone
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File 744

KNREPC COMMENTS

As a general comment, the KNREPC has expressed concern regarding the tolerance limits recommended for the onsite slopes and clay cap. The tolerance limits for the slopes were established based on the as-built condition of the rip-rap slope.

As noted in the Operations and Maintenance (O&M) Plan, the construction phase of the rip-rap slope included certain exceptions from the specified design criteria. The exceptions were noted at the time of construction and approved by the onsite EPA representative. The most significant of these exceptions were over-steep slopes, the lack of compaction of the rip-rap slope and the modification of the "edge of rip-rap" construction detail. The inspection program has been tailored to provide increased emphasis in the area of these exceptions.

The tolerance limits for the clay cap/fill area were established to act as a standard by which any settlement or erosion could be compared. The comparison would then dictate the need for potential corrective action.

It should be noted that this is not a "normal" fill area nor a "normal" rip-rap slope. It is a known source of hazardous materials which has been remediated with an impermeable clay cap and slope stabilization material to prevent infiltration of water or erosion of the slope by the adjacent Ohio River. Special attention should therefore be given to the cap, slope, and surrounding areas. Settlement features, cracks and/or erosional features which may be considered as "normal" but exceed the tolerance limits are considered harmful to the integrity of the cap and/or slope and should be documented and repaired as necessary.

The KNREPC has expressed concern about the required survey. The entire site is approximately 112 acres. However, it should be clarified that only the rip-rap slope and clay cap areas require a survey and they total an approximate 14-16 acres in size.

To allow for an accurate survey of the 14-16 acre slope/cap area, thirty survey monuments were installed in June, 1990. The monuments were placed on the rip-rap slope on 50 foot centers along grid lines spaced 200 feet apart. The survey should incorporate these monuments as well as the five previously existing monuments located on the cap area near the access road.

A concern was expressed regarding the application of herbicides on the rip-rap slope and drainage swales. This annual application should be conducted to negate the growth of excessive vegetation and woody plants which may damage the underlying layers of the slope or prevent a thorough inspection. It is not necessary to spray the entire slope and drainage swale areas each year. Selective spraying should be incorporated to include all areas showing vegetative growth. The areas of vegetative growth should be noted in the quarterly inspection reports.

The KNREPC also commented on the mowing specifications regarding grass height standards and clipping removal. Mowing of the clay cap grass cover should be frequent enough and to an adequate height to facilitate an unobstructed visual inspection and to prevent the establishment of woody plants. The grass height standards listed in the Plan are estimated values to be used for scheduling of mowing frequency. Naturally, more extensive or more frequent mowing events may be required during the months which experience rapid growth. On the other hand, only minimal mowing, if any, may be required during the winter months.

Again, this is not a "normal" cap/fill area. Special consideration should be afforded the area with regard to mowing and removal of clippings. Removing the clippings may potentially result in a need for reseeding and/or regrading portions of the cap. However, it is essential to be able to observe the integrity of the cap without obstruction.

MSD COMMENTS

The MSD had general comments regarding their responsibilities and the term of O&M commitment. It is not within the scope of the Plans and Procedures document to resolve any term of commitment negotiations. It is the intention of the document to serve as a guidance, not as a directive. The document summarizes the necessary procedures required to adequately maintain the site. It also describes the protocol previously employed and recommended by Ebasco during the various O&M events. Certain options are left for the agency or agencies performing the O&M to finalize in the Consent Order signed with EPA. These items include the term of commitment, monitoring action levels, specific health and safety requirements, laboratory acquisition, sampling frequency and the identification of specific qualified subcontractors.

The MSD offered a comment that the rip-rap installed as a bank protection control was of insufficient size. However, it should be noted that the rip-rap is, by design, similar in size to rip-rap used on nearby Louisville Gas & Electric (LG&E) projects (i.e., Cane Run Project and Trimble County Plant). LG&E reports that no maintenance activities have been required in the eleven years the slope has been in place. The design and construction of the slope stabilization materials were reviewed and approved by the EPA.

The MSD also had concerns about assuming responsibility for onsite access road maintenance. Road maintenance activities are non-routine in nature and are to be implemented only if necessary. No specific provisions have been made in the O&M documents for these non-routine repairs.

Associated with the potential road maintenance activities is the maintenance of the gates and barricades at the site access points. Maintenance of these items also involves non-routine activities. The responsibilities of maintaining the gates and barricades are covered in the Plans and Procedures document.

The sole vehicular access point to the site will continue to be at the end of Lee's Lane. A secondary gate has been installed across Lee's Lane by Jefferson County. A new barricade has also been installed to prevent the public from bypassing the gates. These newly constructed items should be included in the site inspection and repaired as necessary. Additionally, the wire barrier at the end of Putman Drive should also be inspected and repaired as necessary to prevent unauthorized access to the site.

Comments were made by the MSD as to the responsibilities of repairing gas collection system components and monitor wells which may potentially be damaged below grade. These are non-routine repairs which may be necessary to adequately maintain the site. This would include excavation and repair of the gas collection system or a portion of the system. Repair of a monitor well damaged below grade may be difficult and/or expensive. If such damage occurs, it may in fact be less expensive to install a new well.

Repair of vandalism is another non-routine maintenance item which was a concern of the MSD. It has always been a problem at the site and may continue until the general public is completely restricted from access to the site. Ebasco has recently repaired some of the vandalism affecting the monitor wells and gas collection system.

New polystyrene gas collection system component identification signs were installed in June 1990. The new signs replaced the

old aluminum signs which had either been stolen or damaged. If the new signs are stolen or damaged by vandals, consideration of a new component identification system may be in order. Additional repairs included the securement of groundwater monitor well MW-05 and associated repair of bullet holes.

The MSD has commented about the potential need to maintain the blower motor and electrical equipment at a capital expense. It is essential that the blower and blower house be maintained as needed. If the blower should experience severe non-repairable damage, a replacement unit is in the custody of Jefferson County. This replacement unit was purchased by the EPA as a part of the Remedial Action. All other essential equipment must also be maintained. However, Ebasco is not aware of other capital reserves available for site use.

Off-site well sampling is a concern of the MSD. The sampling and maintenance of the off-site wells should be required as part of future O&M activities. These wells provide baseline/upgradient samples for comparison to onsite samples. Without these samples, an accurate assessment of onsite conditions can not be made.

The MSD concerns included the onsite systems which have sustained some sort of damage or are not functioning correctly. They stated that these systems have been allowed to remain unrepaired.

Ebasco has been conducting system maintenance at the site since July 1988 as a part of routine and certain previously identified non-routine O&M activities. The last of the contracted O&M events occurred in June 1990. Gas and groundwater monitor wells were repaired in September 1989. The gas collection system signs were repaired/ replaced during Ebasco's final O&M event to repair as much vandalism as possible prior to the completion of the O&M work assignment.

The scope of Ebasco's work assignment included routine O&M tasks and previously identified non-routine tasks only. Certain non-routine tasks such as the blockage of gas collection system were identified during this final trip. It was not possible under the scope of this work assignment for Ebasco to conduct, or to contract a separate vendor to conduct, the non-routine maintenance task identified during the final O&M event.

The MSD has requested clarification of certain O&M activities/ procedures. These requested items are clarified below

- As an associated task to the air sampling, monitoring of the ambient air should be conducted before sampling, periodically during sampling, and after sampling.
- The MSD's interpretation of the "breathing zone" is correct. It is the general area in which sampling and monitoring is undertaken and from which onsite personnel obtain their air. This area may be from 0 to 10 feet or more in height depending on the activity performed.
- With regard to meteorological monitoring, the reference to calculating air dispersion can be deleted from the text. However, "determining environmental exposure from airborne contaminants" should remain.
- "Real time monitoring" equals monitoring potential gas migration prior to, periodically during, and after air samples as well as during all other sampling (i.e., gas and groundwater).

- The gas system was balanced to the point of the obstruction (Well No. 14) during Ebasco's final O&M event (June 1990).
- Jefferson County Building Services personnel are in possession of the velocity meter and manometer as well as the associated tools needed for system balancing.
- The rip-rap should be inspected as near as possible to high and low water stages and after any major flood event. This will allow the inspector to observe the effects of the elevated water, the condition of as much of the slope as possible, and any damage a major flood may cause. The inspections during estimated high and low water levels may be coordinated with the quarterly sampling events.
- A grass height standard of 8-inches may be used if this allows for an unobstructed inspection of the clay cap.
- If high concentrations of contaminants are detected, the responsible agency is morally and ethically bound to "protect the public and environment". This phrase should remain in the document under "Maintenance Action". Any further clarification and/or definition of this phrase should be resolved by the responsible agency and the EPA.